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(US). WELLISCH, Gilbert; 994 Essex Court Way, #4, Midvale, UT 84047 (US).

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(74) Agents: LEBOWITZ, Henry, C. et al.; Pennie & Edmonds LLP, 1155 Avenue of the Americas, New York, NY 10036 (US).

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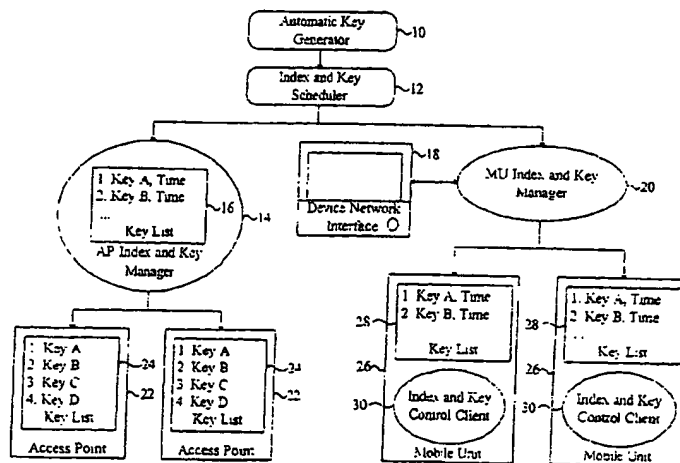
(71) Applicant: WAVELINK CORPORATION [US/US]:
11332 NE 122nd Way, Suite 300, Kirkland, WA 98034 (US).

(72) Inventors: WHELAN, Robert; 545 Kirkland Avenue, Kirkland, WA 98033 (US). VAN WAGENEN, Lamar; 980 E. Diana Hills Way, Sandy, UT 84094 (US). MORRIS, Roy; 8812 NE 191st Place, Bothell, WA 98011

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(54) Title: SYSTEM AND METHOD FOR PROVIDING WLAN SECURITY THROUGH SYNCHRONIZED UPDATE AND ROTATION OF WEP KEYS



Overall Key Update and Rotation Entity Relationships

(57) Abstract: A system and method are disclosed that overcome deficiencies of prior art IEEE 802.11 WEP key management schemes. Preferred embodiments of the present system and method update WEP keys (14) and rotate transmission key indices in a synchronized manner and on a frequent basis making it impractical for a hacker to gather sufficient network traffic using any one WEP key to decrypt that key and without disrupting communications. Preferred embodiments of the present system and method do not require changes in access point (22) or mobile unit hardware, radio drivers, or firmware and are therefore compatible with existing or legacy network infrastructure or components. The disclosed system and method may be used to facilitate secure communications between one or more access points and one or more mobile units (26) and/or groups of two or more mobile units engaging in peer-to-peer associations.

WO 2003/100561 A3



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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P	US 6,453,159 B1(LEWIS) 17 September 2002 (17.09.2002), column 5, lines 37-66; column 6, lines 7-65; column 12, lines 53-63.	1-19
Y	US 6,078,663 A(YAMAMOTO) 20 June 2000 (20.06.2000), column 13, lines 17-37; column 20, lines 34-57.	1-19
A	US 6,167,137 A(MARINO et al) 26 December 2000 (26.12.2000), column 5, lines 37-56; column 7, lines 10-63.	1-19

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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O document referring to an oral disclosure, use, exhibition or other means	*&* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed	

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Authorized officer

Ayaz Sheikh

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